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DATE MAILED: 08/07/2009

NOTICE OF ALLOWANCE AND FEE(S) DUE

31824 7590 08/07/2009 MCDERMOTT WILL & EMERY LLP 18191 VON KARMAN AVE. SUITE 500

IRVINE, CA 92612-7108

EXAMINER
MATTHEAS, JONATHAN R

ART UNIT PAPER NUMBER

3748

APPLICA	ATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/5	74,346	11/28/2006	Mitsuhiro Nishina	050203-0147	8961		
TITLE OF INVENTION: ENGINE EXHAUST EMISSION CONTROL DEVICE AND EXHAUST EMISSION CONTROL METHOD							

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	11/09/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION NO THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This f appropriate. All further c indicated unless corrected maintenance fee notificati	form should be used f orrespondence includin d below or directed oth ons.	or trang the	nsmitting the ISSU Patent, advance on in Block 1, by (a					nould be completed where correspondence address as trate "FEE ADDRESS" for
CURRENT CORRESPONDE	NCE ADDRESS (Note: Use Blo	ock I for	any change of address)	pap	rs. Each additiona	1 paper	g can only be used fo licate cannot be used f , such as an assignme iling or transmission.	r domestic mailings of the or any other accompanying nt or formal drawing, must
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18191 VON KAR SUITE 500		ΥLI	.P	I he Stat add tran	solve cortification that the	ic Good	e of Mailing or Trans s) Transmittal is being ficient postage for firs ISSUE FEE address 1) 273-2885, on the d	mission g deposited with the United it class mail in an envelope above, or being facsimile ate indicated below.
IRVINE, CA 926	12-/108							(Depositor's name)
								(Signature)
								(Date)
APPLICATION NO.	FILING DATE			FIRST NAMED INVENTOR		ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
10/574,346	11/28/2006			Mitsuhiro Nishina			050203-0147	8961
TITLE OF INVENTION:								T
APPLN, TYPE	SMALL ENTITY	IS	SUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	EFEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO		\$1510	\$300	\$0		\$1810	11/09/2009
EXAMI	NER		ART UNIT	CLASS-SUBCLASS				
MATTHIAS, JO	ONATHAN R		3748	060-277000				
"Fee Address" indic PTO/SB/47; Rev 03-02 Number is required. 3. ASSIGNEE NAME AN	ndence address (or Cha /122) attached. cation (or "Fee Address' or more recent) attach	nge of 'Indiced. Us	Correspondence ation form e of a Customer		3 registered pater vely, e firm (having as a gent) and the nam meys or agents. If printed.	memb es of u no nan	era 2pto	
(A) NAME OF ASSIG	NEE			(B) RESIDENCE: (CITY	and STATE OR C	OUNT	TRY)	ocument has been filed for
4a. The following fee(s) as Issue Fee Publication Fee (No	small entity discount p	ermitt		D. Payment of Fee(s): (Plea A check is enclosed. Payment by credit car The Director is hereby overpayment, to Depo	d. Form PTO-2038	is atta	iched.	
	SMALL ENTITY statu	s. See	37 CFR 1.27.	b. Applicant is no lon				
NOTE: The Issue Fee and interest as shown by the re	Publication Fee (if requecords of the United Sta	ired) tes Pat	will not be accepted ent and Trademark	d from anyone other than t Office.	he applicant; a regi	stered	attorney or agent; or th	e assignee or other party in
Authorized Signature _					Date			
Typed or printed name					Registration N			
This collection of informa an application. Confidenti submitting the completed this form and/or suggestio Box 1450, Alexandria, Vir Alexandria, Virginia 2231	tion is required by 37 C ality is governed by 35 application form to the ns for reducing this bur rginia 22313-1450. DC 3-1450.	FR 1.3 U.S.C USPT den, sl NOT	11. The informatic . 122 and 37 CFR O. Time will vary hould be sent to th SEND FEES OR	on is required to obtain or in 1.14. This collection is est depending upon the indiversity of the complex of th	etain a benefit by t imated to take 12 idual case. Any co r, U.S. Patent and D'THIS ADDRESS	he pub minute mmen Trader S. SEN	lic which is to file (and s to complete, includin ts on the amount of tin nark Office, U.S. Dep D TO: Commissioner	by the USPTO to process) g gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,

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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010. OMB 0651-0033



UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,346	11/28/2006	Mitsuhiro Nishina	050203-0147	8961
31824 75	90 08/07/2009		EXAM	UNER
MCDERMOTT V	WILL & EMERY LI	MATTHIAS, J	ONATHAN R	
18191 VON KARN	MAN AVE.	ART UNIT	PAPER NUMBER	
SUITE 500 IRVINE, CA 9261:	2-7108		3748	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 367 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 367 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)				
10/574,346	NISHINA ET AL.				
Examiner	Art Unit				
Ionathan Matthiae	3748				

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERTIS IS (OR REMAINS) CLOSED in this application. If not included
herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS
NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative
of the Office or upon petition by the applicant. See 37 CFR 133 and MPEP 1308.

- This communication is responsive to the Amendment filed on 04/29/09.
- The allowed claim(s) is/are 1, 3, 6-13, 16, 18-24.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - - 1. A Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____
 - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) Thereto or 2) to Paper No./Mail Date
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08),
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date .
- 7. T Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. ☐ Other .

/Thomas E. Denion/

Supervisory Patent Examiner, Art Unit 3748

Application/Control Number: 10/574,346 Page 2

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REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance:

- 2. In reference to claim 1, the second abnormality occurs when a detected voltage of the command signal output to the exhaust gas recirculation device is greater than a predetermined value, or when a detected pressure of intake air compressed by the supercharger deviates from a predetermined range is neither anticipated nor rendered obvious by the prior art of record.
- 3. In reference to claim 12, the abnormality occurs when a detected voltage of the command signal output to the exhaust gas recirculation device is greater than a predetermined value, or when a detected value of intake air compressed by the supercharger deviates from a predetermined value, or when a detected value of intake air compressed by the supercharger deviates from a predetermined pressure range is nether anticipated nor rendered obvious by the prior art of record.
- 4. In reference to claims 18 and 19, the detection step includes: detecting a voltage of the command signal output to the exhaust gas recirculation device, detecting a pressure of intake air compressed by the supercharger, and detecting the occurrence of the abnormality when the detected voltage is greater than a predetermined value or the detected pressure deviates from a predetermined range is neither anticipated nor rendered obvious by the prior art of record.
- Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

- Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Matthias whose telephone number is (571)
 270-5840. The examiner can normally be reached on Monday-Friday 8:00AM-5:00PM.
- 7. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
- 8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thomas E. Denion/ Supervisory Patent Examiner, Art Unit 3748